

## CHRONICLE

## Anniversary of a forester and ecologist

At the end of December, Leonardas Kairiūkštis, professor, habilitated doctor, prominent scientist, member of the Lithuanian Academy of Sciences and Swedish Royal Academy of Agricultural and Forestry Sciences celebrates his 70 th anniversary.

The hero of the anniversary was born on December 28, 1928 in Panemunis rural district (now Rokiškis reg.), Papiškių village, in the family of farmers. In 1947 he graduated from Rokiškis Tumas Vaižgantas secondary school and entered Forestry Faculty of Vilnius state University. Since 1949 the faculty was transferred to the Lithuanian Academy of Agriculture, thus he continued his studies in Kaunas. While studying, he started working as laboratory assistant at the Lithuanian Forest Research Institute.

In 1952 L. Kairiūkštis, graduated from the Lithuanian Academy of Agriculture. Having worked for some time as assistant in the Department of Silviculture, he undertook postgraduate course at the Forest Institute of the Academy of Sciences of the USSR in Moscow, which completed in 1955. Having defended his thesis "Formation of young spruce - deciduous stands and their thinning in the forests of the Lithuanian SSR", he became (in 1956) a candidate of agricultural sciences. In 1956-57 he was head of the Department of Forest Biology and Silviculture at the Lithuanian Forest Research Institute, in 1957-1970 vice-director on research. In 1968 L. Kairiūkštis defended agricultural sciences habil. doctors thesis "Scientific background for the formation of productive spruce-deciduous stands and their thinning (based on the data of conducted studies in the Lithuanian SSR)" at the Forestry and Timber Institute (in Krasnojarsk) of the Academy of Sciences of the USSR. In 1970 he was appointed director of the Lithuanian Forest Research Institute. In the same year professor's title was conferred. In 1972 he was elected regular member of the Academy of Sciences of the Lithuanian SSR, as well as academician secretary of the Department of Chemistry and Biology and member of the Presidium of the Academy of Sciences. He held the position until 1984.

In 1984, having won an international competition, L. Kairiūkštis went to Austria, where until 1988 worked as vice-director of the Environmental Program at the International Institute of Applied System Analysis (IIASA).

Having returned to Lithuania in 1988-1992, he was again appointed director of the Lithuanian Forest Research Institute, in 1992-1997 - chairman of the institute's Senate and head of the Department of Forest Ecology and Silviculture. At present - chief researcher. At the same time in 1992-1997 he was the leader of state research program ECOSLIT "Ecological sustainability of regional development in a historical perspective: Lithuanian case studies".

L. Kairiūkštis is a specialist on forestry and ecology, prominent researcher. Much has been done in developing and organizing the science of silviculture. His range of interests in science is remarkably wide but concentrated in particular on digressive and restoring succession of spruce-deciduous stands, stand growth and formation peculiarities, their structure and productivity, ecological properties of trees and their interspecific as well as intraspecific relationships, utilization of solar energy by trees and stand storeys. He has devised methods to optimize stand structure and density, ways and methods of non - clear final fellings as well as these for the formation of mixed spruce and deciduous stands, has elaborated bioecological and economic classification of trees in mixed stands. Under his leadership a theory of a uniform system for the formation of productive mixed stands and an original theory on the standards of productive stands have been created. He participated in constructing models of standards and in developing target programs which provided insight into the formation of productive pure and mixed spruce, oak, ash, birch and aspen stands as well as in presenting a method to calculate optimal intermediate yield. A lot of his suggestions are applied in forestry, forming, tending and thinning forests, specializing their growing.

Of importance are his works in the fields of dendroclimatochronology and systemic ecology. Studies under his leadership enabled to reveal the peculiarities of climatic fluctuations over the past millenia and design models as a forecasting tool for long-term climatic fluctuations.

Studies on the impact of air pollution upon forest degradation and elaboration of scientific background for regional forest monitoring have helped him discover the feasibility of early diagnostics of changes in forest eco-

systems and perceive ecological conditions of the environment of residential areas. He was the supervisor of studies on systemic diversified changes in natural environment within the framework of international programs "Man and the Biosphere" and ECOSLIT, which allowed him to work out suggestions for sustainable regional development, landscape optimization, ecological balance.

L. Kairiūkštis is distinguished for his great organizational and science popularization activity. He has participated in a series of world-wide congresses on forests, various scientific conferences and meetings, was the organizer of several international symposia. He constantly takes part in the most important nature protection events, is a member of international council of the International Union of Forest Research Organizations (IUFRO). Currently he is appointed as a Group Coordinator "Limits of Development in the World Federation of Scientists Programme Planetary Emergencies". Since 1974 he is the chairman of Lithuanian National Committee of the International Program "Man and the Biosphere".

For a long time he was the leader of scientific technical Society of Lithuanian Timber Industry and Forestry was elected honorary member (1964) of scientific technical Society of Forestry and Timber Industry of the USSR, in 1970-1990 was a member of permanent dendroclimatological commission at the Academy of Sciences of the USSR and was its leader for some time. He is the chairman of Forestry Section of the Department of Agriculture and Forest at the Lithuanian Academy of Sciences, a member of the committee of national Lithuanian programs.

For a long period he was a member of editorial boards of the publication "Girios" and journal "Mūsų girios" ("Our woods" in Lithuanian), at present he is chief editor of the journal "Baltic Forestry", member of editorial boards of the journals "Lesovedeniye" and "Miškininkystė" ("Forestry" in Lithuanian).

L. Kairiūkštis alone and together with co-authors has published more than 500 scientific, science popu-

larization articles, a considerable part of which were published abroad. A total of 20 books and booklets were issued, the most important of which are: "Formation of young spruce and deciduous stands (1959, in Russian), "Forests of the Lithuanian SSR" (1962; in Lithuanian, editor-in-chief and co-author), "Forestry of the Lithuanian SSR" (1968; in Lithuanian, editor-in-chief and co-author), "Scientific basis for the formation of highly productive spruce and deciduous stands" (1969, in Russian), "Forestry abroad" (1970 in Lithuanian), "Formation of mixed spruce stands and cuttings" (1973 in Lithuanian), textbook "Silviculture" (1979; co-author), "Optimization of natural environment of the Lithuanian SSR based on territory simulation" (1982, in Russian), "Standard stands and their formation" (1985, in Lithuanian, co-author), "Lithuanian silviculture: development and perspectives" (1997, in Lithuanian co-author).

Scientific and organizational activity by L. Kairiūkštis was evaluated by different awards. He is an Honoured Lithuanian Scientist. For the theory of mixed stand formation and methods of selective cuttings in 1971 he was awarded Lithuanian state bonus in the field of science and technology, several gold, silver and bronze medals at the Exhibition of National Economic Achievements of the USSR.

For the achievements in European forestry in 1992 he was awarded international Vilhelm Leopold Pfeil's Prize. In 1997 he was elected foreign member of the Swedish Royal Academy of Agriculture and Forests.

Leonardas Kairiūkštis is inseparably related to the Lithuanian Forest Research Institute, its development and activities. It is not only because being the leader of the institute he had a considerable impact on tackling economic issues, but also because the research of most scientists at the institute is close to the ideas of L. Kairiūkštis.

On the occasion of this jubilee we wish dear Academic good health, inexhaustible energy, personal happiness and new scientific achievements.

**STASYS KARAZIJA**